METHODS AND DEVICES FOR ADJUSTING AN ELECTRON-BEAM USED IN AN ELECTRON BEAM PROXIMITY EXPOSURE APPARATUS

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ABSTRACT OF THE DISCLOSURE

The present invention relates methods and devices for adjusting an electron beam used in an electron-beam of the electron-beam proximity exposure apparatus, wherein the method of present invention comprising the step of: forming the electron-beam by passing through a aperture which has a predetermined length part, into a measurement beam which has a cross section having a measurement part thereof corresponding to the predetermined length part of the aperture, memorizing the calibrating information including the electron-beam, wherein the measured lengths are the length of the measurement part of the cross section of the measurement beam measured at a predetermined distance from the aperture under the states of the electron-beam, and each of the states of the electron-beam indicated by the information indicating the state of the electron-beam is memorized in relation to each of the measured lengths, measuring the length of the measurement part of the cross section of the measurement beam at a predetermined distance from the aperture, and calibrating the state of the electron-beam of the electron-beam proximity exposure apparatus on the basis of the length measured in the measuring step in accordance with the calibrating information.